

PUBLICATIONS.

The Surgery of the Heart and Lungs. A Review and Resume of Surgical Conditions Found Therein, and Experimental and Clinical Research in Man and Lower Animals, With Reference to Pneumonotomy, Pneumonectomy and Bronchotomy, and Cardiomy and Cardiorrhaphy. By BENJAMIN MERRILL RICKETTS, Ph. B., M. D. The Grifton Press, New York, 1904.

The researches of the past decade, bringing to light, one after another, new surgical problems in many of the more important visceral diseases, have been so surprising, so definite, so full of the promise of fruitful outlook upon hitherto untrodden fields, that we have scarcely yet had time to recover from the glamour of new light or to realize, in the urgency of fresh practical questions the rich possibilities for original study of other equally fascinating themes. This is notably so in the case of surgical cardiac affections.

Since the early observation of Ambroise Paré that wounds of the heart are not always immediately fatal, attention has from time to time been given to the surgical aspects of these conditions. Indeed, so early as 1648 Riolan advised drainage of pericardial effusions; but it was not, however, until the beginning of the last century that this was actually practiced. It took a little less than one hundred years to pass from the pericardium to the epicardium, for it was only in 1896 that Rehn reported the first successful case of stab-wound of the heart treated by suture. Roberts, however, almost 25 years ago, had determined by experiments that puncture of the heart, with suture of it, would become a therapeutic measure.

Thus it will be seen that we are as yet but on the threshold of cardiac surgery; nevertheless, sufficient material is at hand, partly clinical, partly experimental, to warrant the publication of a critical review of the subject. Three years ago there had already appeared a very complete and suggestive resumé by Drs. Terrier and Reymond, of Paris, and now we have a pretentious work by Dr. Ricketts, of Cincinnati. The last named book, the subject of this review, is a large volume of almost 500 pages, more than half of which is devoted to the surgery of the heart. The remaining portion consists of various sections upon pulmonary surgery. Of the 271 pages devoted to the heart, almost one-half, or about 125 pages, are taken up with bibliography.

The human and comparative anatomy of the heart is considered in the opening chapter. While the matter discussed is interesting enough in itself, we are somewhat skeptical as to the appropriateness of some of it in a work of this character. How much better it would have been to have considered somewhat fully the cardio-thoracic topography as Guibal does, for instance, in his recent article in the *Revue de Chirurgie*. It is, of course, true that a knowledge of the comparative anatomy and physiology of the heart is both important and interesting, but these are so much more fully and clearly discussed elsewhere that we cannot but deplore the insertion of this to the exclusion of other anatomical considerations such as suggested.

Chapter II gives a brief historical account of the experimental researches. We are glad to see reference made to the studies of Kronecker and Schmey, who discovered that the heart might be punctured with but little interference of its action except when a spot in the inter-ventricular septum was touched, when immediate death ensued (Kronecker's coordination centre). But it does not seem to us that the work of Elsberg is given the prominence that its thoroughness and completeness demand. His conclusions, which we do not find here or in other portions of the book, may be briefly summarized as follows: That the heart may be grasped with the hands or forceps and greatly compressed without any appreciable difference in its action, and that it may be penetrated

by a needle or knife, with the production of a temporary irregularity of its action; that penetrating wounds produced during systole bleed more than those produced during diastole, and that wounds of the ventricles produced during systole are larger than those produced during diastole; that oblique wounds bleed less than perpendicular ones; that wounds of the right ventricle are more dangerous than those of the left, because the wall of the right ventricle is thinner, and also because the blood in the right chamber coagulates more slowly; that wounds of the heart heal well, and that the cicatrix is usually complete in about 14 days; that interrupted sutures are better than continuous ones; that superficial sutures are less likely to tear than deep ones; and that sutures should be inserted and tied during diastole, because of the danger of their tearing if tied during systole. The conclusions from Sherman's paper also quoted, but there are several points mentioned in the paper which should have been brought out on account of their practical value. Contrary to Elsberg, Sherman does not find it necessary to suture during diastole. The section on surgical shock is to be commended, although we miss references to the more recent researches of Crile upon this question.

Chapters III and IV give, merely, an account of cardiac malformations and displacements with considerable literature bearing upon the subjects. To what extent these conditions are amenable to surgical treatment, the author does not state. However, the 50 pages given to this matter are certainly out of all proportion to its importance in a work of this kind. The following chapter deals chiefly with the historical side of gunshot, lacerated and incised wounds; and the succeeding one consists of a citation of reported cases of cardioclasia. Theoretically, the subject no doubt belongs in a book of this character; and the author in giving it has, probably, an eye to the possibilities of the remote future. Chapter VII considers cardiorrhaphy, cardiomy, and heart sutures. Notwithstanding that this should be the most important section in the book, it is dismissed in 28 pages, while almost one-half of this amount of space is given to cardiac malformations and displacements. Surely this is not logical perspective. Moreover, the symptomatology is so briefly discussed that it seems almost puerile. The surgical treatment of heart wounds is disposed of in about one page. This is unfortunate, especially when we recall the methodical and detailed manner in which Terrier and Reymond have handled it. The description of the management of cardiac wounds is so unsatisfactory that we refer those interested in the matter to the monograph of the last-named writers. Although justified by Rehn, we are glad to see that Dr. Ricketts condemns probing. With reference to drainage, he advises closing the wound. A close study of the cases with drainage, however, certainly does not justify any such conclusion. And Stewart, in his recent article (*Trans. College of Physicians and Surgeons, Phil., 1904*), says the question is still sub-judice. Common sense, on the other hand, will show the absurdity of closing a wound which is known to be very probably infected, and likely to suppurate.

Evidently from the title of Chapter VIII, cardiac aneurysms are regarded as indications for operative interference. This strikes us as somewhat sanguine in the present development of cardiac surgery. Foreign Bodies, Cardialiths, Calcification and Abscess are considered in the succeeding four chapters. There is nothing very remarkable here. Other chapters follow upon syphilis, benign and malignant tumors. These and those upon the infectious processes, such as anthrax, tuberculosis, gas-bacillus and typhoid infections of the heart, are so remarkable that we refrain from making any further comment. Just what surgical procedures the author would adopt in such emergencies, we do not even guess. It has, however, been suggested to us that in gas-bacillus infections, one might avail himself of the results of studies by

Senn, who showed that it was possible to remove air from the chambers of the heart by means of an aspirating needle without fatal results. The concluding chapter consists of the recital of various experiments upon dogs, in some of which incisions were made into the pericardium and sewed, while in others they were left open. In others incisions were made into the heart muscle and were sutured, and in still others portions of the coronary arteries were ligated. Sometimes the dogs died, occasionally they recovered. The chief criticism on these experiments is that they were not controlled; therefore, as contributions to the science of heart surgery, they have little significance.

That part of the book devoted to the surgery of the lung is open to the same general criticism as that upon the heart. This is the best we can say for it.

Throughout the volume will be found many wonderful illustrations which tax to the utmost the ingenuity and imagination of the reader. Plates XV, XVII, XVIII, XIX, XXIII, are very much in point. We are also pleased to know that plate XXIII represents an "Epithelial Carcinoma."

Taken all in all, this is the most disappointing work of its class that has ever fallen under the reviewer's notice. As a demonstration of the possibilities of padding, it is highly successful; but as a systematic, logical and scientific presentation of the present status of the surgery of the heart and lungs, it is a monstrous failure.

A. J. L.

Operative Surgery. By JOSEPH D. BRYANT, M. D. Fourth revised edition, printed from new plates. Two volumes, 8 vo., 1527 pages, 1793 illustrations. D. Appleton & Co., New York and London, 1905. Sold by subscription. Price, cloth, \$10.00.

In these two volumes, gracefully dedicated by the author to his pupils during the past 25 years, the practical general surgeon stands out clearly. This fact is strikingly apparent in the first paragraphs relating to the taking of histories and to anesthesia. While the form of the original edition has been retained, commendable revision has been made, and a great number of very recent contributions to surgery have been added. The chapter on ligation of arteries is tersely written, and beautifully illustrated in colors. Plastic surgery is accorded many pages, and a long list of practical illustrations. The chapter on operations of the neck deserves particular commendation, especially for the profuse description of goitre operations. The consideration of abdominal surgery, covering 1169 pages, contains much of practical interest to the general practitioner, although in many instances the additions seem to have been made by neophytes in clinical work as well as in foreign bibliography. For instance, in abdominal operations it is stated that, "the absence of organism in the field of operation, as determined at the time by the microscope, should be regarded as contra-indicating drainage." Much space is devoted to suture of the common duct after choledochotomy, for stones, a procedure which is seldom employed by up-to-date surgeons. The descriptions and illustrations of Senn's bone-plates, Halsted's hammer, Murphy's oblong anastomotic button and Doyen's resection-choledochorrhaphy, are perhaps apropos in a museum, but certainly seem misplaced in a modern text-book. The brilliant Mayo brothers will read with surprise the numerous operations described under their names, and to which they have never, for very pertinent reasons, made any claim. The use of the elastic ligature in gastric and intestinal anastomoses is well illustrated and warmly recommended. The surgery of the ureter is dealt with in much detail. The chapter on hernia offers much interest. Decapsulation of the kidney is dismissed with ten lines. Breast operations receive considerable attention from the author. Professor Halsted will view with dismay the chart of instruments required for excision of the breast, showing only 3 hemostats. Fowler is rightly given credit for decortication of the lung, while Ricketts, on the contrary, is erroneously mentioned as

having added to the knowledge of heart surgery. An excellent description is given of Proust's perineal prostatectomy, after which Young's and all other anatomic methods have been modeled. Chismore's contributions to litholapaxy are highly praised. In conclusion, the reviewer considers Bryant's operative surgery a useful addition to any practitioner's library. Both printing and binding are more commendable than the publisher's predatory use of foreign plates without knowledge of their origin.

D. T.

Drink Restriction (Thirst Cure) Particularly in Obesity.

The sixth of the series of monographs on Diseases of Metabolism and Nutrition by von Noorden has appeared from the press of E. B. Treat & Co., under the title of "Drink Restriction (Thirst Cure) Particularly in Obesity." The work is interspersed with observations by the translator Dr. Boardman Reed, and is worthy of careful perusal by every physician, as the translator aptly says in his preface "especially in this country, where hot-water drinking and colon douching have been carried to an irrational, ridiculous and often very harmful excess by the advice of certain irregular practitioners and cranks." The fallacy of Oertel's and Schweninger's theories has been here most lucidly set forth, by the report of the author's experimental investigations on the effect of thirsting upon the metabolism of human subjects, which experiments would seem to show that a reduction in the intake of fluids has no direct effect on the combustion of adipose tissue, the loss in weight seen during thirst cures being due to the loss of water from the tissues, and the effect of the restriction of liquids upon the appetite. The effect of restriction of liquids upon the heart in obese subjects, is discussed, and such restriction urged as a means of overcoming somewhat the danger of overtaxation of that organ, a danger which is ever present in the obese. The last section is devoted to a consideration of the restriction of liquids in chlorosis, in hepatic cirrhosis, and in hemorrhages. A number of tables illustrative of the author's physiological experiments are appended. The press work is good, and the monograph is decidedly entertaining and instructive.

G. H. E.

The receipt of the following reprints is acknowledged:

By Frank C. Todd, Extirpation of the Lachrymal Sac After Injection of Paraffin; An Exact and Secure Tucking Operation for Advancing an Ocular Muscle; by Wm. S. Bainbridge, A Case of Extensive Carcinoma of the Tongue and Neck, Presenting Points of Special Interest; Two Cases Presented to the Clinical Society of the New York Post Graduate; by T. A. Woodruff, Use of Diaphoretic Agents in Ophthalmic Therapeutics; by W. J. Morton, Memoranda Relating to the Discovery of Surgical Anesthesia and Dr. William T. G. Morton's Relation to This Event; by Joseph D. Craig, A Consideration of Some Tendencies in Modern Medical Education; by John W. Trask, The Dangers of Unrestricted Traveling of Consumptives; by Frank Paschal, Presidential Address, State Medical Association of Texas; by W. S. Franklin, Congenital Bony Atresia of the Posterior Nares, Operation, Partial Result.

International Clinics. Volume 1, 15th series, 1905. Philadelphia: J. B. Lippincott Company.

The present series of these interesting volumes begins with one that is quite up to the past standard. There are 3 articles on Treatment; 5 on Medicine, of which number 3 deal with the heart; 5 on surgery; 3 on neurology; 1 on obstetrics, and something over 100 pages of a general resumé of the progress of medicine during the year 1904. One of the best essays in the volume, and one that will be of considerable interest, no doubt, is that of Archibald Young, on "Skin Grafting in the Late Treatment of Severe Burns Involving Extensive Areas of Skin." It is well illustrated.